

We claim:

1. A method of producing synthetic resin film for laminates, said synthetic resin film comprising a substrate impregnated with a thermosetting resin, said method comprising
  - (a) impregnating the substrate with a thermosetting resin composition comprising an uncured thermosetting resin and a low profile additive, and
  - (b) drying the impregnated substrate of (a).
2. The method of claim 1 further comprising at least partially curing the uncured thermosetting resin in the impregnated substrate.
3. The method of claim 1 wherein said low profile additive comprises ceramic mircrospheres.
4. The method of claim 1 wherein said low profile additive comprises thermoplastic polymer powder.
5. The method of claim 1 wherein said low profile additive comprises polyethylene powder.
6. The method of claim 1 wherein said uncured thermosetting resin is selected from the group consisting of melamine-formaldehyde, urea-formaldehyde, phenol-formaldehyde and mixtures thereof.
7. The method of claim 1 wherein the substrate is paper.
8. The method of claim 1 wherein low profile additive is present in amounts sufficient to provide said synthetic resin film with a scratch resistance of at least about 2.5 Newtons.
9. Synthetic resin film for laminates produced by the method according to claim 1.
10. The method of claim 1 further comprising
  - (c) impregnating the substrate of (b) with a second thermosetting resin composition comprising a second uncured thermosetting resin and a low profile additive, and
  - (d) drying the impregnated substrate of (c).

11. The method of claim 10 further comprising at least partially curing the second uncured thermosetting resin in the impregnated substrate.
12. The method of claim 10 wherein said uncured thermosetting resin and said second uncured thermosetting resin are the same.
- 5 13. The method of claim 10 wherein said low profile additive comprises ceramic microspheres.
14. The method of claim 10 wherein said low profile additive comprises polymer powder.
- 10 15. The method of claim 10 wherein said low profile additive comprises polyethylene powder.
16. The method of claim 10 wherein said uncured thermosetting resin and said second uncured thermosetting resin are independently selected from the group consisting of melamine-formaldehyde, urea-formaldehyde, phenol formaldehyde and mixtures thereof.
- 15 17. The method of claim 10 wherein the substrate is paper.
18. The method of claim 10 wherein the low profile additive is present in amounts sufficient to provide said synthetic resin film with a scratch resistance of at least about 2.5 Newtons.
- 20 19. Synthetic resin film for laminates produced by the method according to claim 10.
20. Synthetic resin film for laminates comprising a substrate impregnated with an at least partially cured thermosetting resin and low profile additive.
21. Synthetic resin film of claim 20 wherein the substrate is paper.
22. Impregnated paper of claim 20 wherein the thermosetting resin is selected from the group consisting of melamine-formaldehyde, urea-formaldehyde, phenol-formaldehyde and mixtures thereof.
- 25 23. Synthetic resin film of claim 20 wherein the low profile additive is ceramic microspheres.
24. Synthetic resin film of claim 20 wherein the low profile additive is thermoplastic polymer powder.
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25. Synthetic resin film of claim 20 wherein the low profile additive is polyethylene powder.
26. Synthetic resin film of claim 20 wherein low profile additive is present in amounts sufficient to provide said synthetic resin film with a scratch resistance of at least about 2.5 Newtons.
27. A process of producing laminate, said process comprising assembling a plurality of layers of synthetic resin film at least one of said layers being synthetic resin film produced according to the method of claim 9, and subjecting said assembly to heat and pressure sufficient to effect consolidation of said layers to produce a laminate.
28. The process of claim 27 wherein the heat necessary to effect consolidation is 230 to 340 degrees F and the pressure necessary to effect consolidation is 800 to 1600 psi.
29. The laminate produced by the process of claim 27.
30. A process of producing laminate, said process comprising assembling a plurality of layers of synthetic resin film, the uppermost of said layers being the synthetic resin film of claim 10, and subjecting said assembly to heat and pressure sufficient to effect consolidation of said layers to produce a laminate.
31. The process of claim 30 wherein the heat necessary to effect consolidation is 230 to 340 degrees F and the pressure necessary to effect consolidation is 800 to 1600 psi.
32. The laminate produced by the process of claim 30.
33. A laminate comprising a synthetic resin film of claim 9 laminated to a substrate.
34. The laminate of claim 33 wherein said substrate comprises wood.
35. The laminate of claim 33 wherein said substrate is selected from the group consisting of particle board, medium density fiber board and composite panel.
36. A laminate comprising a synthetic resin film of claim 10 laminated to a substrate.

37. The laminate of claim 36 wherein said substrate comprises wood.
38. The laminate of claim 36 wherein said substrate is selected from the group consisting of particle board, medium density fiber board and composite panel.

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